MEDICAL CARE AND EDUCATION WITHOUT BOUNDARIES:

Mr. Chairman and members of the committee:

Thank you for allowing me to briefly share with you the experiences of our Nebraska-based telemedicine and distance education company, American Educational Telecommunication, LLC (AET). Founded in 1999, AET's mission is to utilize information technology tools that enhance the delivery of healthcare and education to people and professionals lacking access to these services due their geographic location.

As an Ob/Gyn physician, moving from a metropolitan area with two medical centers, to practice in a rural setting, I quickly realized the challenge to access specialty consultations for my patients, which potentially affected their outcome and well-being. Additionally, not having access to educational opportunities of continuing education and doctor-to-doctor interactions, can quickly place rural healthcare professionals at a disadvantage in their ability to know the latest and best treatments for our patients.

Unfortunately, at that time, the cost of communication lines was very expensive and reimbursement by insurance carriers for second opinion consultations was not yet covered. Subsequently, an Egyptian born colleague with AET, was contacted by authorities in the Egyptian Ministry of Health, expressing their interest in accessing U.S. based medical services utilizing the then developing communications technology.

This eventually lead to an international multi-point live interactive demonstration, which took place on August 7, 1999, between two facilities in Nebraska, one in Maryland, and Cairo University in Egypt. Demonstrations of today's telemedicine diagnostic equipment along with the live video conferencing between professionals led to the realization by the Minister of Health and others that this was a valid service to improve access to quality care and education to the people and healthcare professionals in Egypt.

From February 4-8, 2000, live daily interactive broadcasts, sponsored by the Egyptian Society of Cardiology, took place at the 50th annual cardiology congress in Cairo from Creighton University in Omaha and Washington Hospital here in D.C.

The following are testimonials following these events:

"AET's telemedicine and tele-educational services will have a major impact on medicine in Egypt over the next few years. We spend millions of dollars each year to send patients abroad for treatment. By having doctors use AET, I expect these costs will decrease dramatically.

Medical students will benefit too because they can view lectures on a real-time basis from other universities worldwide, obtain certificates from a distance and get accreditation.

At the cardiology conference, I carefully watched the reactions of my colleagues as they watched live transmissions from Creighton University. The transmission quality was so good that a few of my associates initially didn't believe it was being broadcast to us in real-time! The bottom line is that this technology will not only be good for Alexandria University, but for our entire nation.

–Dr. Sherif El Biltagui, Lecturer of Cardiology, Alexandria University, Alexandria, Egypt

"The image quality was superb and the technology is a major breakthrough for our country. I envision AET's services being utilized for virtually any medical specialty-from anesthesiology to cardiology to urology. Egyptian hospitals, medical clinics and medical centers will be able to connect to an AET medical telecom operations center, which will be invaluable in helping our physicians to better diagnose and manage their patients' medical conditions."

–Dr. Ayman KA. Magd, Associate Professor of Cardiology, Azhar University, Cairo, Egypt

Additional live international interactive demonstrations have included: dedication of the Suzanne Mubarak (Egypt's First Lady) Telemedicine Center at Cairo University; demonstration to Japan's royal family during their visit to Cairo, which assisted in obtaining Japan's funding for a new pediatric hospital in Cairo; and, the grand opening ceremonies of Egypt's new broadband services.

Dramatic life changing results have been and continue to be witnessed, particularly with children. A 10-year-old Egyptian boy's life changed after he, his mother, and his physician in Cairo received a second opinion consultation for a rare neurologic condition affecting his vision and balance. This consultation was done via live videoconference with a neuro-opthalmologist at Washington University. The boy's physician reviewed his history, performed the requested exam and tests live (at the direction of the specialist in St. Louis), a diagnosis was made, and appropriate changes in the boy's medications were ordered. There was an immediate improvement in the child's condition and he fully recovered from his illness.

As this patient's physician stated: "You don't know all the answers all of the time, and it's really useful to be able to consult with someone else who gives you new insights into the same problem. This technology has tremendous applications because of the huge geographical expanse."

With today's teleconferencing systems, doctors are now able to have face-to-face discussions and share critical X-rays, electrocardiograms, echocardiograms (sonar-type studies of the hear and blood vessels), and angiograms (dye injection inside the heart and blood vessels) over the high-speed two-way information network. They can exchange opinions on diagnosis, treatment, surgical techniques, post-surgery treatment and even view diagnostic and therapeutic procedures in real-time.

As one noted pediatric heart surgeon, Dr. Peterz Einstein of the U.S. charity Children's Heart Project International stated:

"All these numbers and pictures that are essential for taking care of a child with heart disease can now be communicated halfway around the world so both teams of doctors can simultaneously see the visual data. A phone call doesn't give you the immediate availability of visual data that you have with a real-time videoconference. There's almost no substitute for both teams of doctors looking at the same visual data simultaneously, discussing it, or arguing about it in a way that videoconferencing makes possible. Certainly, with the videoconference, the discussions that go on between doctors are as effective as when the participating teams are in the same room with each other. All of this goes into the ultimate diagnosis and care of the child."

AET's international telemedicine and distance education services have expanded into Mexico and Latin America. AET's partner, the Universidad de Autonoma in Guadalajara, serves as the Latin American hub for in-country and international access to second opinion consultations. Unlike the high utilization of services from centers in the Middle East, where the government provides payment for the services, our experience in Mexico shows a tremendous interest and desire for the services, but reluctance on patients' part due to costs. We are currently working on the insurance reimbursement issue and feel that once this is resolved, utilization will increase.

It has become very apparent to us, that wherever we travel and present AET's products and services, the American healthcare system is highly revered for its quality and compassion. AET, for example, has just entered into a multi-year contract with the Ministry of Health in the United Arab Emirates. Their interest lies not only in second opinion consultations, but accessing continuing medical education for their health professionals. We are confident that as a result of this contract, we will be able to expand the services to the surrounding Gulf countries as well. Recent trips to Thailand and other Southeast Asian countries have demonstrated a similar interest in accessing the American healthcare system and education. I believe that AET's experience is an example of how a small U.S.based company can and has built relationships overseas, which can enhance U.S. diplomacy. It must be stressed, that considerable attention and respect for the social systems and culture of the various regions is paramount to any successful implementation of these services. Building these trusting relationships requires considerable time and patience.

AET will also be launching a round-the-clock health channel, initially in the Middle East, that will deliver content via satellite and the Internet. Programs will educate people on

important healthcare issues such as diabetes, pediatrics, women's health, cancer, fertility, cardiology and more. Because of our numerous business, academic, and institutional healthcare industry alliances, we'll be able to deliver timely and cost-effective programming throughout the region, and eventually worldwide.

It is our goal that with the continued use of digital teleconferencing technology, we can help remove the boundaries to high quality medical care and help to provide access to specialized expertise and information to all.

Finally, I would again like to express my sincere appreciation to you Mr. Chairman and the committee members, for inviting me to testify today and I am open to any questions you may have for me.

Respectfully submitted,

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